

6.0

Ports, Aviation and Related Facilities Element

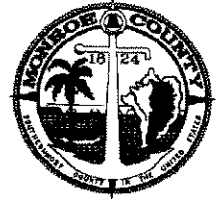


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6.0 Ports, Aviation and Related Facilities

6.1 Aviation Facilities

Monroe County is served by a wide variety of aviation facilities. Key West International Airport and Marathon Airport provide scheduled airline service. The Boca Chica Naval Air Station on Boca Chica Key fulfills a mission of national defense and pilot training. A private seaplane base on Stock Island has daily flights to the Dry Tortugas and privately owned and operated airstrips are at Lower Sugarloaf Key, Summerland Key, Plantation Key and Ocean Reef.

This extensive and diverse variety of facilities reflects the long history of aviation in the Keys. It also reflects the unique geography of the Keys. These islands are between the Florida Mainland and the island of Cuba and the Caribbean at large. Within a short distance are the Bahamas Islands to the east and the Yucatan Peninsula of Mexico to the southwest.

6.1.1 Key West International Airport

A. History

Key West International Airport is the primary airport available to the public in Monroe County and has the longest history.

Not long after the Wright Brothers first flew, J.A.W. McCurdy attempted a flight in 1911, from Key West to Havana, Cuba. Although that flight was not successful, in 1913 Domingo Rosillo and Augustin Parla Ordoná each flew to Cuba. Rosillo completed the 90 miles to Havana first and won a \$10,000 prize from the City of Havana. Parla then set a new over water record of 119 miles to Mariel, Cuba (Borel, 1991).

A short time later, in 1919, the first commercial flight between the United States and an overseas country was made by Lt. Thomas Otto flying to Cuba from Key West. Subsequently, mail and passengers were transported by seaplane between Key West and Havana by Aeromarine West Indies Airways operating at the north end of Duval and Simonton Streets (Windhorn and Langley, 1973). However, the unreliability of twin engine planes led to the birth of Pan American Airlines, who obtained the mail contract and provided service with a three engine Fokker from the present location of the Key West Airport (Langley, 1982).

After six years of regular service to Cuba, in 1934, Pan American inaugurated regular service between Key West and Miami (Borel, 1991). National Airlines, followed ten years later with Miami to Key West service and billed its flights as a gateway to Latin America (Windhorn and Langley, 1973).

In the early years the present location of the Key West International Airport was privately owned. However in the World War II, it was purchased by the Federal Government and turned primarily into a dirigible base (PBS & J, 1991) although four runways were provided as evident on a 1943 Aerial photograph (Windhorn & Langley, 1973).

After the war, the site was sold to Monroe County for \$150,000.00, and George Faraldo, a Key West native carrying out a life dedicated to aviation, became the first airport manager. In the mid 1950's, bonds were issued. The runway was realigned to its present orientation and in 1956, the current terminal was built. (PBS & J, 1991 & Milo Smith, 1970).

At this time National Airlines was providing jet service from New York via Miami and Aerovias Q Airline, owned by Fulgencia Batista, the ruler of Cuba, flew ten to twelve flights daily between Havana and Key West. The round trip fare for the thirty minute flight was \$20.00 plus a \$2.00 Tourist Tax added to fund the Key West terminal (Dooley, 1991 and Langley, 1982)

However, changes in the Cuban Government led to changes in Key West. Normal service to Havana ceased. A little later, during the emergency of the Cuban missile crisis, an air traffic control tower was constructed at the airport.

B. Airport Operations

In 1976, there were 8,795 commercial operations and 36,504 commercial enplanements (passengers boarding a flight). By 1981, this had grown to 11,000 operations and 94,492 enplanements (PBS & J, 1991). The growth has continued and the airport manager reported there were 40,000 scheduled commercial operations and 400,000 passengers in 1990.

General Aviation is accommodated by the Fixed Base Operator (FBO), Island City Flying Service. As early as 1982 there were approximately 78 general aviation flights daily or approximately 28,000 annually. However, by 1990, this had grown to approximately 60,000 annual operations, including nearly 2,000 jet operations. In 1984, there were 52 based aircraft at the FBO (PBS & J).

Currently, Key West International Airport is served by six airlines with a total of 47 scheduled flights departing daily to Tampa, Gainesville, Jacksonville, Miami, Fort Lauderdale, West Palm Beach, Orlando and Tallahassee. In addition, charter flights bring tourists to the city and Federal Express provides express package delivery. Although commercial jets have provided service in recent years, none are currently operating.

C. Existing Facilities

Key West International Airport's runway (9/27) is 4,800 feet long and oriented east and west. It was built in 1954, but received a two inch overlay and surface grooming in 1977. The surface can support a 130,000 pound aircraft with dual tandem wheel gear or a 95,000 pound aircraft with dual wheel gear. Approximately 85% of all approaches and departures are to the east.

The taxiway is parallel to the runway for its entire length and is connected to the runway by four 300 foot connector taxiways. All taxiways are 50 feet wide. The general aviation and commercial aviation aprons comprise approximately 74,000 square yards and were seal coated in 1981. There are 72 tie down locations for general aviation and four positions used for loading commercial passengers. Ten general aviation hangars exist.

Other facilities serving the airport include the navigational aids of a VORTAC; a non directional beacon; straight-in-airport surveillance radar approach from Key West Approach Control; and the Key West

control tower manned from 7:00 A.M. until 10:00 P.M. (PBS & J, 1991). The runway has medium-intensity runway lights, runway end indicator lights, and a four-box, visual approach slope indicator (VASI) for each direction. Lighted guidance signs are on the taxiway and the segmented circle and wind cone are marked and lighted (PBS & J, 1991).

The main terminal contains space for ticketing, baggage claim, car rental, gift shop, passenger waiting, fire and rescue, restaurant, restrooms, customs, agriculture and immigration, airport management, National Weather Service and FAA Office for a total floor area of approximately 31,700 square feet (PBS & J, 1991).

Satellite buildings on the east side of the main terminal provide ticketing and baggage claim for one airline, Federal Express package delivery, and Avis Car Rental.

The FBO, Island City Flying Service building was renovated in 1991. In addition, a maintenance hanger and office expansion have been approved (Major Conditional Use Development Order #09-90). Paved and unpaved automobile parking is available in an area in front of the terminals. This includes space for general parking and rental cars. In addition, there are automobile service areas operated by two rental car companies. In the parking lot the traffic circulation has recently been improved and a row of palm trees has been added. The parking area frequently floods and drainage improvements are needed.

D. Analysis of Service Demand and System Needs

The Key West International Airport Master Plan (PBS & J, 1991) reviews operational trends and forecasts the future levels of operations. However, historical records are frequently contradictory and correlations do not exist with the expected factors of population, per capita income, or price indices because of the high use by tourists and airport use is seasonal (forty percent January through March). Also, international events in the Caribbean can affect airport use as occurred in 1979, when a massive flux of people from Haiti came to South Florida (PBS & J, 1991).

Nevertheless, the Master Plan does contain forecasts which have been extended, by interpolation, to the year 2010 to compare with the Comprehensive Plan planning horizon. These forecasts (Table 6.1) indicate there will be a doubling or tripling of all criteria and operations between 1986 and 2010. Also, based aircraft will double, aircraft operations (general and commercial) will nearly double, enplanements will nearly triple and peak hour aircraft operations will nearly double.

Based on these forecasts, the Master Plan identifies the existing and forecasted capacity limits. These capacity limits are summarized for 1986 to 2006 and are extended, by interpolation, to the planning horizon of 2010 (Table 6.2).

The projections indicate that, by the turn of the century, airfield hourly operations will begin to exceed capacity although annual operations will remain below capacity by 2010. In addition, the commercial service apron, general aviation apron, commercial service terminal, general aviation terminal, and automobile parking are now at or exceed capacity. However, the parking demand may not be a constraint due to the high tourist component of Key West's air travelers and the frequent use of rental cars, taxis and limousines. In addition, the airport drainage will need to be improved (PBS & J, 1991).

Table 6.1
Existing and Forecasted Key West Airport Operation

Year	1986	1991	1996	2006	2010
Based Aircraft	52	67	86	99	104
General Aviation Operations (1,000's)	53	63	74	99	110
Commercial Operations (1,000's)	25	26	27	28	30
General Aviation Enplanements (000s)	92	111	134	191	214
Commercial Enplanements (000s)	131	185	239	348	391
Cargo (Tons)	206	243	308	576	683
Peak Hour Operations					
General Aviation	47	55	64	87	96
Commercial	11	12	12	13	13
Peak Hour Passengers					
General Aviation	102	195	233	334	374
Commercial	165	240	300	455	517

Table 6.2
Summary of Airport Capacity and Demand - Key West

	Existing Capacity	1986	1991	1996	2006	2010
Hourly VFR Operations	87	58	67	76	100	110
Annual Operations (000s)	204	78	89	101	128	139
Commercial Service Apron Area (square yards) Parking Positions	18,000 6	27,000 9	27,000 9	27,000 9	30,000 10	31,000 10
General Aviation Terminal Gross Area (square yards) Tie Downs Hangar Positions	21,000 72 5	42,000 88 18	49,000 88 20	62,000 108 26	76,000 135 30	82,000 149 32
Commercial Service Terminal Gross Area (square feet)	32,000	40,000	58,000	73,000	110,000	125,000
General Aviation Terminal Gross Area (square feet)	1,200	4,100	4,900	5,600	7,700	8,500
Automobile Parking General Aviation Spaces General Aviation Area (square yards) Community Spaces Community Area (square yards)	30 1.1 80 2,800	110 3.9 248 8,800	129 4.6 360 12,800	150 5.3 450 11,000	204 7.2 683 24,200	226 8.0 776 27,500

In reviewing the adequacy of the runway length, the Master Plan considers the factors of: aircraft intended to serve; the non stop trip length to be flown; the useful load of the aircraft; and aircraft performance characteristics. For instance, the existing runway does not accommodate operations of certain aircraft without limiting the load and/or range of such craft. These include business jets such as Lear Jets, Cessna, Citation, Gulfstream II and Falcon 20 and airline passenger jets (Folker F-28 MK4000 and Boeing 727-100). The conclusion of the Master Plan is that a 600 foot runway extension will be needed.

As a result of the foregoing analysis the Key West International Airport Master Plan concludes with several major recommendations for improvement. These are:

- 1) Extend existing Runway 9/27 600 feet and extend the existing parallel taxiway to accommodate the runway extension;
- 2) Construct Federal inspection facilities;
- 3) Expand commercial service terminal building;
- 4) Construct additional aircraft parking apron;
- 5) Construct T-hanger units;
- 6) Construct automobile parking lot;
- 7) Designate helicopter landing area.

E. Surrounding Land Uses

The Key West International Airport exists on a very limited site. To the west lies the Key West High School and much of the City of Key West. To the north are residences and again, much of the City. These large, established residential areas form a major deterrent to the operation of jet aircraft with the associated noise as well to an overall airport expansion. To the east is U.S. Highway A1A, Cow Key Channel and the residential and maritime industrial areas of Stock Island. To the south is the highway A1A and the Atlantic Ocean. In addition to these constraints surrounding the site, the airport itself contains salt ponds and mangroves which pose an environmental limitation to expansion of facilities.

In 1991, Monroe County prepared the Key West International Airport FAA Part 150 study (BR & R, 1991). As a result of this study a draft ordinance was prepared to regulate the airport and airport noise and forwarded to the FAA for review prior to adoption by the County. These include limiting development around the airports, requiring sound proofing in new construction, and requiring disclosure of the airport's existence during land sales. In addition, other possible strategies for noise abatement were identified.

F. Obstructions and Tall Structures

There are sixteen (16) obstructions within the FAR part 77 imaginary airspace surface of the Key West International Airport. In addition, there are thirty eight (38) FCC licensed (or proposed) structures within the future Part 77 surface (Figure 6.1) (Greiner Inc., 1991).

Obstructions are defined as existing or proposed future objects, including mobile objects, that are:

- a) Of a height greater than 500 feet above ground level (AGL) at the site of the object, regardless of location or relationship to an airport.

Table 6.3
Tall Structures

NOS ST NO	V	ST	CITY	LATITUDE DEG MIN SEC	LONGITUDE DEG MIN SEC	OBSTACLE TYPE	FREQ	CURRENCY DATE = 03/30/92 AGL HT	AMSL HT	STROBE IND	ACCUR H V	MARK IND	FAA STUDY NO	ACTION	JDATE
10-1724	0	FL	KEY WEST	24 32 46N	081 48 17W	TOWER		0306	00311	R	2 C	Y	80S01937	CHANGED	90218
10-2207	0	FL	KEY WEST	24 32 53N	081 47 12W	TOWER		0133	00143	R	1 B		990C0606	CHANGED	90204
10-2205	0	FL	KEY WEST	24 33 16N	081 48 16W	TOWER		0175	00185				990C0606	ADDED	86245
10-2206	0	FL	KEY WEST	24 33 18N	081 48 05W	TOWER		0208	00217		2 C		990C0606	CHANGED	90211
10-0086	0	FL	KEY WEST	24 33 22N	081 48 23W	TOWERS		0300	00307				69MIO354	DI SMANTLED	81327
10-1552	0	FL	KEY WEST	24 34 02N	081 44 55W	TOWERS	3	0155	00159	R	2 A	Y	78S01065	CHANGED	90204
10-0224	0	FL	KEY WEST	24 34 09N	081 46 14W	TANK		0035	00042	N	4 D		78S01065	CHANGED	84067
10-0069	0	FL	KEY WEST	24 34 17N	081 44 25W	TOWER		0154	00164	R	1 A	Y	990C0606	CHANGED	74054
10-2623	0	FL	STOCK ISLAND	24 34 17N	081 44 20W	TOWER		0160	00163	R	5 D	Y	88S00492	CHANGED	89240
10-0157	0	FL	STOCK ISLAND	24 34 42N	081 44 50W	TOWER		0162	00168	R	2 A	Y	76S02001	CHANGED	82293
10-2177	0	FL	KEY WEST	24 35 00N	081 45 58W	TOWER		0177	00180	R	5 D	Y	84S02714	CHANGED	86223
10-0185	0	FL	BIG PINE KEY	24 38 49N	081 19 54W	TOWER		0200	00204	R	2 D	Y	99LM0000	CHANGED	83117
10-1786	0	FL	BIG PINE KEY	24 38 56N	081 36 32W	TOWERS	4	0253	00255	R	4 D	Y	82S00885	CHANGED	82223
10-2166	0	FL	BIG PINE	24 39 02N	081 18 34W	TOWER		0371	00374	R	3 C	Y	84S03051	CHANGED	87117
10-1449	0	FL	PERKY	24 39 31N	081 32 18W	TOWER		0320	00322	R	5 D	Y	87S00240	CHANGED	90197
10-0898	0	FL	SUGARLOAF KEY	24 39 34N	081 32 18W	TOWER		0360	00364			Y	76S01859	CHANGED	77091
10-1644	0	FL	SUGARLOAF KEY	24 39 34N	081 31 50W	TOWER		0200	00204	M	5 D	N	89S00460	CHANGED	91105
10-0708	0	FL	SUGARLOAF KEY	24 39 35N	081 31 22W	TOWER		0226	00231			Y	90S02066	ADDED	00000
10-2337	0	FL	RAM ROD KEY	24 39 35N	081 31 22W	TOWER		0500	00504	R	5 D	Y	90S02066	CHANGED	87229
10-1593	0	FL	BIG PINE KEY	24 40 07N	081 21 38W	TOWER		0203	00207	R	5 D	Y	79S01764	CHANGED	80323
10-0180	0	FL	BIG PINE KEY	24 40 28N	081 21 40W	TOWER		0370	00373	M	4 D	N	89S00459	CHANGED	91105
10-1922	0	FL	CUDJOE KEY	24 40 35N	081 23 43W	TOWER		0607	00611	R	5 D	Y	81S01208	CHANGED	83138
10-1781	0	FL	MARATHON	24 40 39N	081 23 43W	TOWER		0255	00258	R	5 D	Y	99IPO000	ADDED	82146
10-0146	0	FL	BIG PINE KEY	24 40 40N	081 22 52W	TOWER		0251	00254	R	2 D	Y	80S00652	CHANGED	80354
10-0825	0	FL	BIG PINE	24 41 21N	081 22 52W	TOWERS	4	0200	00205			Y	81S00263	ADDED	00000
10-0722	0	FL	MARATHON	24 41 31N	081 06 30W	TOWERS	2	0168	00172	N	4 D		990C6394	CHANGED	81125
10-0757	0	FL	MARATHON	24 41 56N	081 05 20W	TOWERS		0252	00255	R	2 A	Y	990C6394	CHANGED	90008
10-1373	0	FL	CUDJOE KEY	24 42 03N	081 30 32W	BALLOON		0165	14000	S	9 1	N	99LR0000	CHANGED	79212
10-0153	0	FL	BOOT KEY	24 42 20N	081 04 37W	TOWER		0142	00144	R	2 D		76S01998	CHANGED	77011
10-2781	0	FL	MARATHON	24 42 25N	081 06 17W	TOWER		0318	00324	M	5 D	N	89S00731	CHANGED	91210
10-1275	0	FL	MARATHON	24 42 36N	081 05 42W	TOWER		0220	00226	R	5 D	Y	77S01693	ADDED	78065
10-0686	0	FL	MARATHON	24 42 39N	081 05 45W	TOWER		0238	00254	R	1 A	Y	84S02468	CHANGED	90008
10-0716	0	FL	MARATHON	24 42 42N	081 05 56W	TOWERS	2	0157	00161				00S06113	CHANGED	76153
10-2848	0	FL	MARATHON	24 42 43N	081 05 56W	TOWER		0270	00276	M	5 D	N	89S00163	CHANGED	91224
10-2616	0	FL	MARATHON	24 43 42N	081 02 24W	POLE		0055	00062	L	1 A	N	990C6394	ADDED	90022
10-2308	0	FL	MARATHON	24 43 47N	081 02 04W	TOWER		0110	00117	N	3 C	Y	99IPO000	CHANGED	90253
10-2549	0	FL	MARATHON	24 43 54N	081 00 50W	TOWER		0160	00165	N	5 D	N	86S03119	CHANGED	88348
10-2946	0	FL	MARATHON	24 45 35N	080 57 22W	TOWER		0250	00250	R	5 D	Y	89S00536	ADDED	92013
10-0987	0	FL	GRASSY KEY	24 46 01N	080 56 47W	TOWER		0210	00210			Y	72S02114	CHANGED	74305
10-0845	0	FL	LONG KEY	24 48 45N	080 49 20W	TOWER		0250	00252			Y	76S02000	CHANGED	74274
10-1052	0	FL	LONG KEY	24 48 46N	080 49 35W	TOWER		0175	00179	R	2 D		76S02000	CHANGED	77011
10-2809	0	FL	LAYTON	24 49 17N	080 49 08W	TOWER		0260	00265	M	5 D	N	89S00464	CHANGED	91203
10-0152	0	FL	ISLAMORADA	24 54 24N	080 38 48W	TOWER		0213	00218	M	5 D	N	90S00358	CHANGED	91224
10-2783	0	FL	ISLAMORADA	24 55 06N	080 38 06W	TOWER		0213	00218	R	2 D	N	76S01997	CHANGED	77011
10-2169	0	FL	ISLAMORADA	24 56 13N	080 37 04W	TOWER		0165	00170	R	5 D	N	89S01429	CHANGED	91231
10-0675	0	FL	TAVERNIER	24 57 34N	080 34 30W	TOWER		0293	00298	M	5 D	Y	84S00860	CHANGED	86279
10-1357	0	FL	PLANTATION KEY	24 58 44N	080 33 03W	TOWERS	2	0275	00277	R	2 E	Y	68MIO230	CHANGED	82139
10-1181	0	FL	TAVERNIER	25 00 24N	080 31 13W	TOWER		0503	00509	M	5 D	N	89S00465	CHANGED	91126
10-0189	0	FL	TAVERNIER	25 00 32N	080 31 11W	TOWER		0220	00227	R	1 D	Y	82S00829	CHANGED	85329
10-1973	0	FL	TAVERNIER	25 01 35N	080 30 30W	TOWER		0254	00258	R	5 D	Y	99HCO000	CHANGED	82132
													83S01845	CHANGED	84067

Table 6.3 (continued)
Tall Structures

NOS	ST	V	S	CITY	LATITUDE		LONGITUDE		OBSTACLE TYPE	FREQ	CURRENCY DATE = 03/30/92				MARK IND	FAA STUDY NO	ACTION	JDATE
					DEG	MIN	SEC	DEG			MIN	SEC	AGL HT	AMSL HT				
10-2005	D	FL	ROCK HARBOR	25	05	01N	080	27	11W	TOWER	0200	00210	R	5 D	N	99FC0000	CHANGED	84081
10-2606	D	FL	ROCK HARBOR	25	05	29N	080	26	37W	TOWER	0250	00260	R	5 D	Y	87SD0549	CHANGED	89156
10-0155	D	FL	ROCK HARBOR	25	05	50N	080	26	11W	TOWER	0164	00174	R	1 D	Y	76SD1996	CHANGED	82090
10-0156	D	FL	ROCK HARBOR	25	05	50N	080	26	12W	TOWER	0203	00213	R	1 D	Y		CHANGED	82083
10-0562	D	FL	FLAMINGO	25	08	36N	080	55	06W	TOWER	0326	00329	R	5 D	Y	71SD1405	CHANGED	74274
10-2013	D	FL	KEY LARGO	25	14	07N	080	19	37W	TOWER	0371	00381	R	5 D	Y	87SD0681	CHANGED	89130
10-2378	D	FL	KEY LARGO	25	15	44N	080	18	51W	TOWER	0267	00272	R	5 D	N	86SD03061	CHANGED	87271
10-0702	D	FL	KEY LARGO	25	18	43N	080	17	05W	TOWER	0157	00165	R	2 D		99LM0000	CHANGED	74274

Source: U.S. Dept. of Transportation, Federal Aviation Administration, Southern Regional Office, 1992

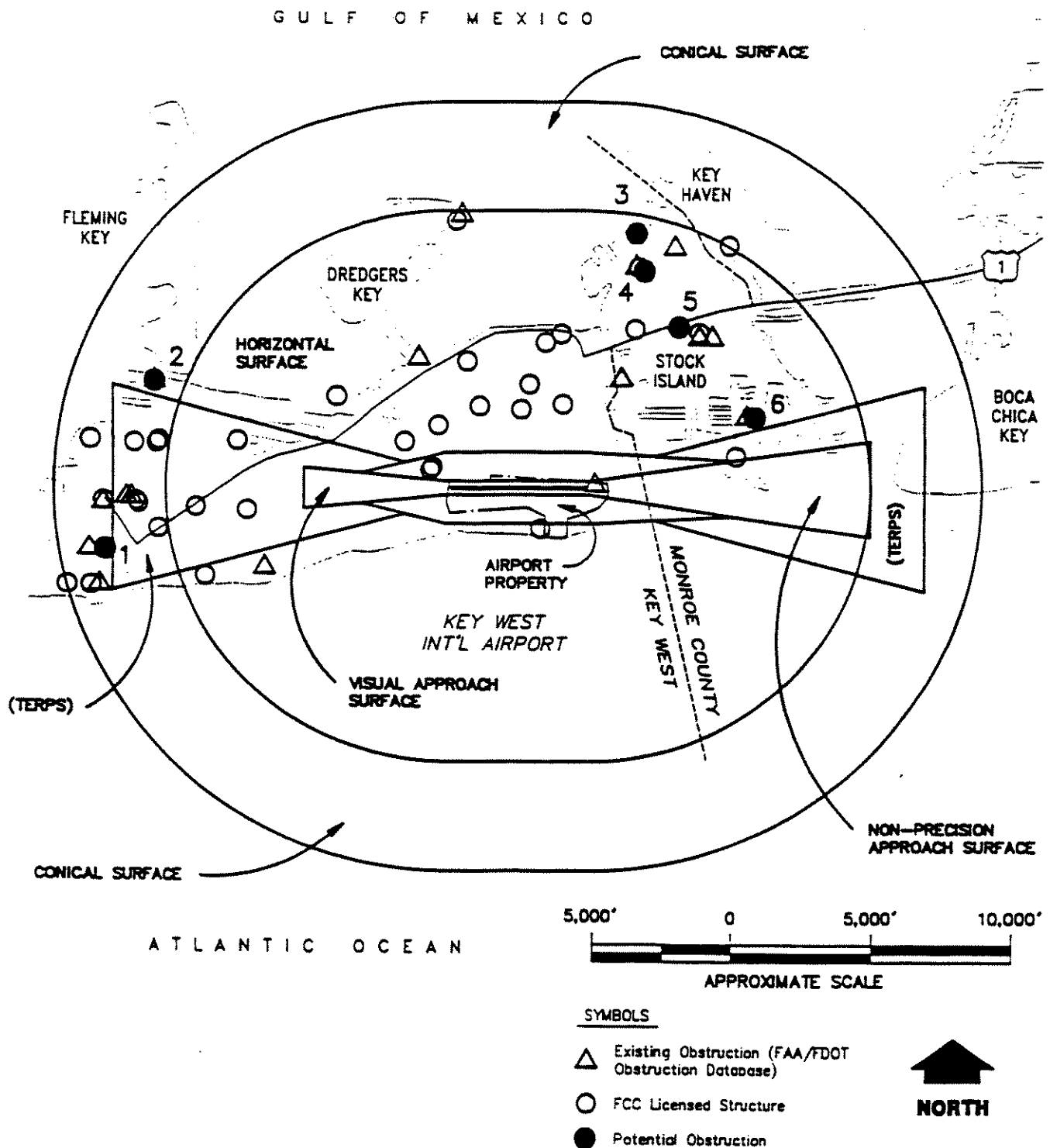


Figure 6.1

Key West International Airport Tall Structures & Airspace Boundaries

Source: Greiner Inc., 1991. Florida Aviation System Implementation Plan.

- b) Of a height greater than 200 feet AGL, or above the established elevation of an airport, whichever is higher, within three (3) nautical miles of an airport's reference point. The height limitation increases by 100 feet for each additional nautical mile the object is from the airport up to a maximum of 500 feet.
- c) Of a height that would penetrate the obstacle clearance requirements of an airport's initial approach segment departure area, or circling approach area as specified by FAR Part 77.

Table 6.3 lists the tall structures by latitude and longitude for all of Monroe County. The height, obstacle type and number of obstacles per site are also listed.

G. Surface Transportation

Access to Key West International Airport is by way of the four lane highway, U.S. A1A. As identified in the Master Plan, access is not a problem at this time (PBS & J).

No railroad or water access to the airport exists, nor is likely. However, transit service, although not presently available, could exist in the future and has been contemplated (personal discussions with personnel of Key West Port and Transit Authority).

Thus surface access to the airport is and most likely will continue to be provided by the automobile in the form of private cars, car rentals and taxi cabs and limousines. As noted earlier, as parking demand grows beyond capacity, a greater reliance on car rentals and the taxi cab/limousine service will be needed.

6.1.2 Marathon Airport

A. History

Marathon Airport, at Mile Marker 51.5 on Vaca Key, also provides scheduled airline service to Monroe County. This airport originated in World War II and was further developed by the state of Florida. Daily service to Miami was begun in 1956. Also in the 1950's, Monroe County took over management of the airport. In 1969 the existing terminal was built (PBS & J, 1986) and 6,000 passengers used the airport (Milo Smith, 1970).

B. Airport Operations

In 1982, there were 38,900 general aviation operations, 16,580 commercial operations and 24,481 passengers boarded commercial flights (PBS & J, 1986). In 1990 the number of annual commercial passenger enplanements had dropped to 20,382. However, in 1990 there were as many as 38 scheduled flights a day to and from Miami and Fort Lauderdale (RS & H, 1991), compared to only 12 flights to and from Miami in 1986 (PBS & J, 1986).

C. Existing Facilities

The single runway at Marathon Airport (7/25) is 5,000 feet long with 400 foot long paved overruns at each end. The runway is 100 feet wide with stabilized shoulders and is lighted with medium intensity

lights. The orientation is generally east-west. The runway will support a 47,000 pound aircraft with single-wheel gear, a 66,000 pound aircraft with a dual-wheel gear, and a 110,000 pound aircraft with dual tandem gear. In 1983 the FAA, based upon a Convair 440 wingspan, approved deviations (reduction) to the separations of the runway centerline to the taxiway centerline, aircraft parking area and building restriction line.

A 50 foot wide taxiway with stabilized shoulders runs the entire length of the runway and also has medium intensity lights. This taxiway provides access via connected taxiways to the 40,000 square feet of commercial apron and 282,000 square feet of general aviation apron (PBS & J, 1986).

Marathon does not have an air traffic control tower, but there is a non-precision instrument approach on runway 7 with a circular or straight-in non directional beacon approach (PBS & J, 1986).

The Marathon terminal building is 2,600 square feet. It contains ticketing, baggage claim, car rental waiting area, advertising, managers office, a phone booth, vending machines, restrooms and a partially paved parking lot for 48 cars (PBS & J, 1991).

The two fixed base operators (FBO) are located in new hangars and provide jet and aviation fuel. The Marathon Flying Club is located in two hangars in the clear zone at the east end of the runway. The Monroe County Mosquito Control is also located at the east end of the runway but is outside of the clear zone (PBS & J, 1986).

Crash, fire and rescue service is provided from the Marathon Volunteer Fire Department Building that opens directly onto the airport as well as US 1 (PBS & J, 1986).

D. Analysis of Service Demand and System Needs

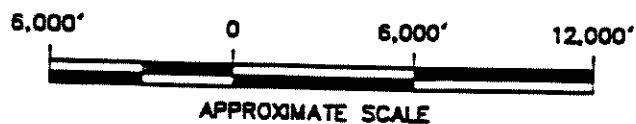
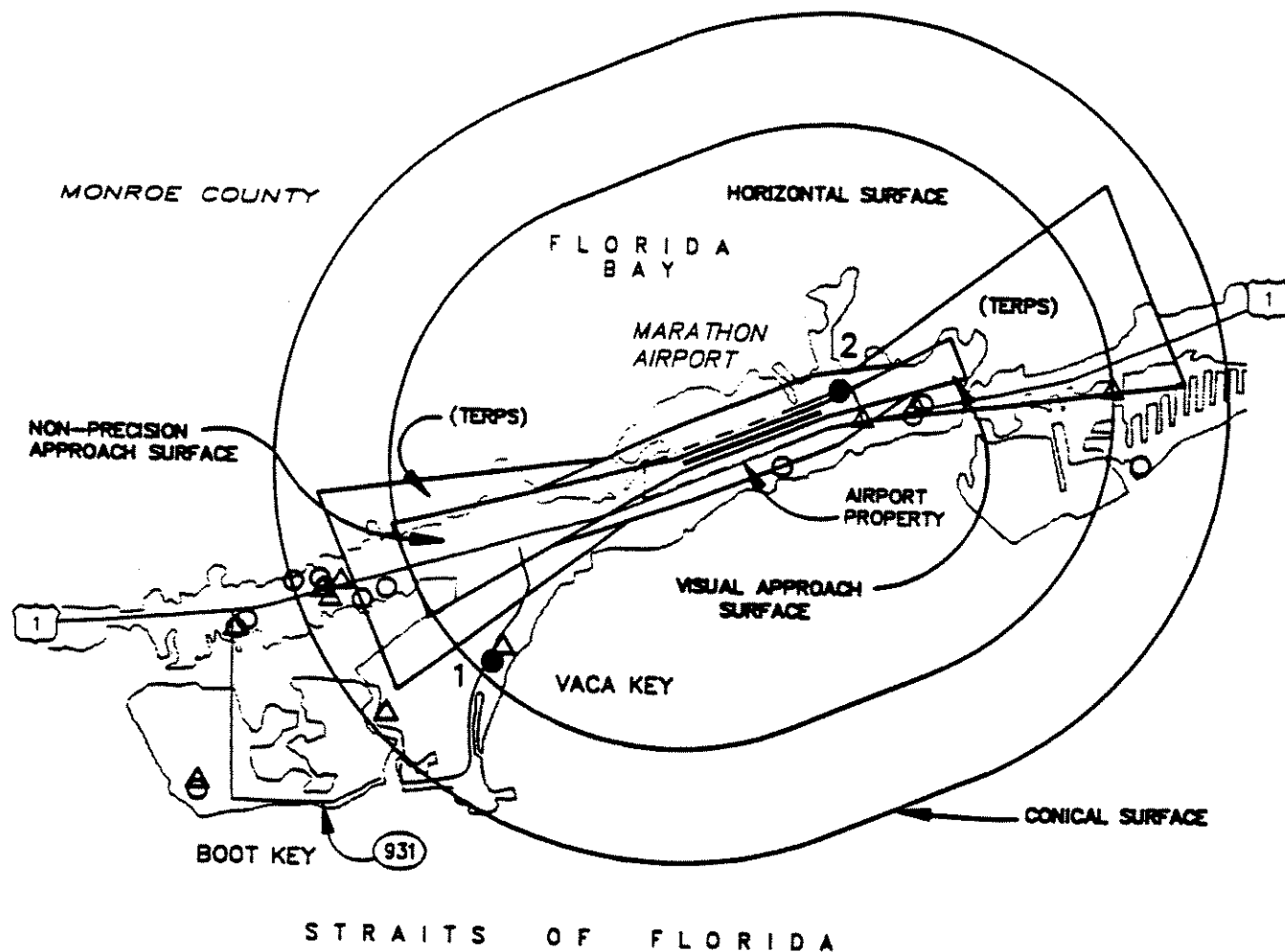
As identified in the Marathon Airport Master Plan of 2010, the existing runway provides sufficient capacity for operations well beyond the planning horizon and the General Aviation Terminal will meet demand until nearly 2006. However, the existing demand for service aprons, commercial service terminal space and automobile parking currently exceed capacity (PBS & J, 1986). The Marathon Terminal Area Study further documents the deficiency in the commercial terminal areas through a detailed analysis of eight forecast methodologies. Currently the County is seeking permits to expand the commercial terminal.

The Marathon Airport Master Plan also reviews the adequacy of the runway. The existing FAA approved deviation to standards for separations of the taxiway center line, taxiway aircraft parking and building restriction are noted but no modifications are recommended. However, an airport drainage system will be needed to eliminate ponding between the runway and taxiway. This will then reduce the hazard caused by birds using the ponding areas.

E. Surrounding Land Use

Similar to the Key West International Airport, the Marathon Airport is surrounded by developed areas of the community and many established residences. To some extent the airport's impact on its neighbors is reduced by a thick hammock along Aviation Boulevard on the north, U.S. Highway 1 and its wide right of way on the south and industrial development on the east.

GULF OF MEXICO



SYMBOLS

- △ Existing Obstruction (FAA/FDOT Obstruction Database)
- FCC Licensed Structure
- Potential Obstruction



Figure 6.2
Marathon Airport Tall Structures & Airspace Boundaries.

Source: Greiner Inc., 1991. Florida Aviation System Implementation Plan

A further environmental constraint on the airport is manifested by the existence of the nests of burrowing owls (Athene cunicularia) on site (Personal discussions with Florida Game and Fish Commission Biologist, Dr. Peter Kalla). These birds are listed by the state of Florida as a Species of Special Concern (Wood, 1989). Consequently, if the nests remain where they are, the nests could affect the location of future facilities.

F. Obstructions and Tall Structures

There are eight (8) obstructions in the FAR part 77 imaginary airspace of the Marathon Airport (Figure 6.2). There are also two (2) potential obstructions and twelve (12) FCC licensed structures (Greiner Inc., 1991).

G. Surface Transportation

The Marathon Airport is not now, nor likely to ever be served by water or rail modes of service. Transit does not now exist in Marathon but could in the future. The terminal upgrade will be designed to accommodate normal transit vehicles (buses). Nevertheless surface access is now and will continue to rely on automobiles.

Automobile access to the airport is provided by U.S. Highway 1 and this will continue for the planning horizon of the Comprehensive Plan. U.S. Highway 1 is a four lane highway with curbs and gutters and has adequate right-of-way for left and right turn lanes.

The existing access points or driveway consist of a service entrance near the west end of the airport and a driveway at the terminal. The current rental car parking lot is provided with the dirt road from this driveway. When the terminal is expanded these access points will be adjusted accordingly.

6.1.3 Boca Chica Naval Air Station

Naval aviation got fully underway in Key West by 1917 with the development of a seaplane facility on Trumbo Point. After World War I this facility became inactive until World War II when it was needed for operations and training. Eventually most operations were consolidated at Boca Chica (NAS, 1991). Although the facility was used in the 1950's, (five aircraft evident in a Monroe County Planning Department aerial photograph from approximately 1954), currently the Trumbo Point Seaplane Base is not regularly used although it does still exist.

Although not widely known, Monroe County had originally acquired property on Boca Chica for an airport (Windhorn & Langley, 1974). However, once World War II began the Federal Government obtained the land and by 1943 the Army and Navy had developed three extensive runways for defense against German submarines. Currently, this facility provides substantial training activities in addition to supporting operational forces.

During the 1970's and 1980's the Navy implemented an Aircraft Installation Compatibility Use Zone (AICUZ) program to prevent incompatible land use from encroaching into areas affected by aircraft operations. This resulted in the Navy purchasing affected vacant lots and Monroe County adopting supportive zoning regulations.

The Boca Chica runways have frequently been mentioned as alternatives the Key West International Airport. They are long enough to accommodate large jets and sufficiently isolated as to not pose a disruption to the residential communities in Key West. Nevertheless, the Navy has not relinquished the facility or agreed to a joint use facility.

6.1.4 Private Aviation Facilities

A. Stock Island Seaplane Base

The Key West Seaplane Service is located within the Key West City limits on the northside of Stock Island. This service has six flights daily to the Fort Jefferson National Monument at Dry Tortugas. Primarily, this serves tourists to the Fort. However, this service also provides a vital link for official visitors and supplies to this remote area.

B. Sugarloaf Shores Airstrip

The Sugarloaf Shores Airstrip is located at Mile Marker 17 near the Sugarloaf Lodge on Lower Sugarloaf Key. The runway is paved and is 3,000 feet long. Approximately 10 airplanes are based there and a sightseeing service is available. This facility is used primarily for residents of the area and guests of Sugarloaf Lodge.

C. Summerland Key

The Summerland Key Airport has been in place since 1959 and the community has grown up around this facility. This airport primarily serves the pilots and private planes in the adjacent residences. In addition, although a private facility, the owners allow regular use by public agencies including the State of Florida Marine Patrol. In addition, the airstrip, as with most private facilities, is and has been available for emergency landings, medical airlifts and hurricane evacuation.

This airport is owned and operated by the Summerland Key Cove Airport Company. The runway is paved and 2,500 feet long. The number of based aircraft varies from approximately twenty five (25) out season to fifty (50) in season.

D. Tavernaero Airstrip

The Tavernaero Airstrip was developed as a private airstrip in the 1970's for the adjacent residences and is located at the east end of Plantation Key. The runway is not paved and is approximately 3,000 feet long. Aircraft are based at the facility but are housed on the aircraft owner's property. The number of aircraft varies but remains around fifteen (15).

E. Ocean Reef

The Ocean Reef airstrip provides service to the Ocean Reef community. In 1984 the Provincetown Boston Airline flew service to this facility. Now, however, no commercial service is available. The runway is paved and 4,000 feet long. In February 1989, 28 planes were on site. There is space for approximately thirty five (35) (REDI, 1991).

6.1.5 Demand for Future Airports

As indicated earlier the peak hour operations at the Key West International Airport will begin to exceed capacity by the turn of the century. This can be accommodated by:

- 1) Increasing occupancy of flights; and
- 2) Diverting more operations throughout the day, night and week;
- 3) Using larger planes.

The latter two options may well exacerbate the impact on the residential area surrounding the airport. Consequently, Monroe County will need to look for alternative airports, such as Boca Chica Naval Air Station or elsewhere in the Lower Keys as remote locations or the Trumbo Point seaplane base in downtown Key West.

In the Upper Keys, initial studies have indicated a demand for a small general utility facility (Monroe County, 1986). However, such a facility would require a large tract of land able to be cleared. Such a site does not exist.

Nevertheless, as the level of service deteriorates on U.S. 1 it will take longer to reach the Miami, Homestead, or Marathon Airports. As a result the demand for some sort of air service to the Upper Keys can be expected to grow.

6.2 Ports

The maritime heritage of the Florida Keys began before they were a part of the United States of America. Key West, with a natural deep water harbor, quickly became one of the most important ports of the Eastern Seaboard. In the early part of the twentieth century, Henry Flagler extended the Florida East Coast Railroad to Key West because the Panama Canal had recently opened and Key West was much closer than the next the closest port, Charleston. In addition, the railroad linked with ferries in Key West allowing direct travel from New York to Havana (Albury, 1991). However, with the destruction from the 1935 hurricane and the Depression, this trading arrangement ceased.

Eventually other commercial U.S. ports developed and surpassed Key West. Still, Key West maintained ferries to Cuba and was a major commercial fishing center. However, these activities also declined and the Florida Keys are not the hub of maritime activity they initially were. However, Key West is now developing as a cruise ship port and a privately developed, privately owned port has developed on Stock Island.

6.2.1 Stock Island Safe Harbor & Peninsula Area

A. History

Although there is a long history of port activity in Key West, the Safe Harbor/Peninsula area on Stock Island did not exist as a natural port or deep water access as did the Key West Harbor. Instead, this harbor was created by dredging in the 1950's. However, once created, it was soon used. Shrimp boats were on site and fish houses were built even before the dredging had been finished (Planning Department

Aerial Photography from approximately 1954). Finally, a ferry boat to Cuba was operating prior to the closing of relations between Cuba and the United States (Dooley, 1992).

B. Existing Facilities

The port area on Stock Island is located on the south side of Stock Island around Safe Harbor (bounded by Shrimp Road, Fifth Avenue, Fourth Avenue, and Front Street) and the peninsular area at the south end of Maloney Avenue (Figure 6.3 on page 6-21).

Appendix 1 lists each of the properties in the port and provides the owner, Property Appraiser's Real Estate number, nearest street and use. The waterfront area of Safe Harbor is nearly totally developed and contains traditional port or port dependent uses. Beginning at the west side of the entrance and continuing around the harbor the land uses consist of a scarified, upland tract ten (10) acre harbor with ship wharfage and fuel tanks, an automobile junk yard, several shrimp houses, commercial fishing, mixed industrial, a sewage treatment plant, a solid waste recycling yard, additional land used for commercial fishing, the Safe Harbor Marina with livaboard vessels, charterboats, boat repairs and cabinet shops, shrimp docks, the electric generating plant owned by the City Electric System (CES), and the Florida Keys Aqueduct Authority equipment yard and treatment plant. In addition, a closed dog racing track (without waterfront) is located at the intersection of Shrimp Road and Fifth Avenue.

The current uses in the peninsular area are Munro Marina, commercial fishing, industry and boat building, Peninsula Marine Boat Yard and Marina, and FAA air traffic antennae, Oceanside Marina, and Hickory House Restaurant with land used for commercial fishing.

C. Analysis of Existing Service Demand and System Needs

Commercial Fishing

Commercial fish landings are the primary freight or cargo use of the Safe Harbor/Peninsula area. Table 6.3 lists the extent and type of catch. As indicated, in 1988 through 1990, an average of approximately 9,300,000 pounds of seafood, including 2,500,000 pounds of shrimp, were landed annually.

Table 6.4
Pounds of Seafood Landed on Stock Island

Year	Shrimp (1)	Other Seafood (2)	Total (3)
1988	2,751,015	5,796,827	8,547,842
1989	2,406,844	7,597,184	10,004,028
1990	2,494,618	7,072,382 (4)	9,507,000 (4)

- (1) All of Monroe County. However most shrimp facilities are on Stock Island.
- (2) Total less shrimp.
- (3) Reported for all of Stock Island.
- (4) Preliminary estimates.

Source: United State National Marine Service

This indicates shrimping has declined in Monroe County. In 1980, over 6,500,000 pounds of shrimp were land in Monroe County (Unpublished data from the National Marine Fisheries).

Cargo and Freight

After seafood, fuel for the City Electric System generating plant is the next major cargo or freight into Safe Harbor. Each month approximately four (4) barges arrive with #2 and #6 fuel oil. This allows CES to maintain a minimum of ten (10) days fuel at all times. Most barges contain 8,000 barrels with a barrel equivalent to 42 gallons. Consequently one barge delivery is equivalent to 42 tanker trucks (8,000 gallons per tanker).

If the current electric power line to the mainland was not operational for an extensive period of time, then the current rate of deliveries could increase to eight (8) barge deliveries per month or the equivalent to 336 tanker trucks.

Fuel demand by the CES may expand as the gas turbine on Key West is moved to Stock Island and as the lower keys population is increased. This could lead to a slight increase in barge traffic or larger barges. No dock expansion is contemplated. However, a boat ramp is planned in order to improve the ability to launch oil spill equipment if necessary.

There is no routine demand for deliveries to the Florida Keys Aqueduct Authority (FKAA) property. However, the engineering staff reports the FKAA does maintain the seawall to allow emergency access by barges and cranes.

There has been some interest in further developing Safe Harbor into more of a traditional freight handling harbor. This was the major topic of the Key West Port Study by CE Maguire, Inc. for the Key West Port and Transit Authority in November, 1987. This report concluded "There is little economic rationale nor market demand for the development of a competitive cargo port facility" (Maguire, 1987). This was based on several factors:

- 1) Expansion of the Port of Miami and Port Everglades have created excess capacity and economies of scale compatible with containerization limit the opportunities for smaller ports;
- 2) There is a limited cargo hinterland for a Key West facility; and
- 3) The availability of competitive and cost-effective trucking is limited.

It is possible that use could be made of the empty trucks returning to Miami and the north in general. In the Port Study, it is estimated 160 heavy trucks arrive in Key West each day on average (Maguire, 1987). However, many of these are trucks are specialized in service and freight. Consequently, this "dead volume" may not be sufficient to balance the volume associated with shipping.

If Stock Island cannot operate efficiently as a point of entry or departure of cargo, it could possibly function as a location for transshipment of waterborne cargo by unloading the cargo from large ships on to smaller ships. This would require additional equipment, a deeper channel and appears to be solely in the domain of steamship operators (Maguire, 1987). The community could attempt to attract such an investor.

Finally, the above analysis is based on the assumption the highway to the mainland will always be open to allow the delivery goods and supplies to the community. This may be an overly optimistic assumption. Due to unforeseen emergencies, there could be a period of time when the harbor will be a critical link to the outside world.

Marinas and Boats Yards

Marinas and boat yards account for a major use of the land in the Safe Harbor/Peninsula area of Stock Island. At the end of Maloney Avenue, Number One Boats, Inc., has fabricated commercial and recreational boats. At Peninsular Marine there are roughly forty four (44) wet slips, approximately 120,000 square feet actively used for hauling boats and another 220,000 square feet available for boat work.

Oceanside Marina is a full service marina oriented toward the recreation boater. There are approximate seventy (70) wet slips and a dry boat storage barn of approximately 30,000 square feet outdoor boat storage, engine repair service, boat store, and fuel sales. Safe Harbor Marina has converted from a heavily used shrimping facility to a marina with a wider, more diverse range of services, such as commercial fishing, boat repair, livaboard boats, charter boats, boat dockage, wood working and cabinet shops, and head fishing boats.

There are two facilities for hauling vessels as large as shrimp boats. One is operated on the west side of Safe Harbor in the shrimp boat area and the other is in the yard along the west side of the entrance channel into Safe Harbor.

As the population in the lower keys grows, the demand for additional marinas will grow. Also, increased transient boats to and from the Caribbean could increase demand for boat yards and transient boat slips.

Passengers

Stock Island has also been suggested as a point for passenger ships. Prior to the closing of relations with Cuba, a ferry did operate from Stock Island (Dooley, 1992). Recently Key West has again begun to handle passenger ships in the guise of cruise ships. This trend in cruise ship accommodation began in October 1984 (C.E. Maguire). Currently ships anchor in Harbor, or berth at Mallory Square or the Truman Annex dock. In 1991, approximately 180 days were scheduled to receive cruise ships and on approximately twenty (20) days, two cruise ships were scheduled.

Stock Island however, is not particularly well suited for this type of service. Unlike Key West, Stock Island does not have a large historic district with a pedestrian-oriented downtown. In addition, the only large available tract of land potentially available (the ten acres on the west side of the entrance channel) only has road access via a private easement in poor condition and lined by a junk yard. Also, the reported controlling depth into Safe Harbor is only thirteen feet (NOAA, 1985).

Changes in Cuba

In order to fully forecast the future of a port, it is necessary to look beyond the port itself. Literally blooming over the horizon is the country of Cuba. For centuries, the Keys were intimately linked to Cuba. In historical terms, the severing of this relationship is a recent phenomenon that may not last beyond the twenty year planning horizon of the Comprehensive Plan.

It is nearly impossible to predict how changing relations with Cuba will affect the ports in Monroe County. The range could include Cuba becoming a source for local food, a major destination of tourists, a catastrophic wave of refugees, or a large increase in transient recreational boats traveling through the Keys between the Caribbean and the Gulf Coast of the United States and Mississippi River.

Conclusion

In conclusion, it is projected that the port area on Stock Island will continue to be an important resource to the community. The port will be needed by the electric and water utilities for supplies. The seafood industry may decline but it probably will not disappear all together. A cargo transshipment facility could help diversify the economy. As the lower keys population increases, the demand for recreational boat facilities will increase. Also, the port could accommodate emergency delivery of supplies.

In the final analysis, however, making projections and forecasts for ports is somewhat dependent on being able to forecast the sea. All one can hope to do is expect change and be prepared for it.

D. Surrounding Land Use

Figure 6.3 depicts the land uses on Stock Island. The area is commercial and contains affordable housing. Many commercial businesses complement the harbor with uses such as propeller shops, repairs, and marine supplies.

E. Surface Transportation

Other than roads and water access, no other modes of surface transportation, such as rail lines or high speed rail, are available. Furthermore, these modes do not exist in Monroe County and are not expected to exist in the next 20 years.

The actual harbor front properties of Safe Harbor are accessed directly by Shrimp Road, Fifth Avenue, Fourth Avenue, and Front Street on Stock Island. The peninsula area is located at the south end of Maloney Avenue on Peninsular Avenue. Access to these street from U.S. 1 is by way of Fifth Street, Cross Street, and McDonald Boulevard.

Currently, severe flooding occurs on Peninsular Avenue and at the junction of Fifth and Fourth Avenues. Shrimp Road into the port at the west side of the entrance channel is a private easement. This easement is as narrow as thirty feet is frequently constrained by the adjacent junk yard. In order for the harbor operations to be improved, these deficiencies will need to be rectified.

Water access to Stock Island is by way of the Main Ship Channel into Key West and then by way of a course roughly paralleling the south shoreline of Key West. Safe Harbor is then entered by an entrance channel. The peninsular area is then entered by way of a branch from this entrance or by Boca Chica Channel.

A comparison of chart 1251, 5th Edition, October 3, 1960 revised December 19, 1961 (Figure 6.4), and chart 11445, 24th Edition, July 20, 1985 (Figure 6.5), indicates the entrance channel to Safe Harbor and the Boca Chica Channel have silted in from controlling depths of twenty one (21) and twelve(12) feet to thirteen (13) and eight (8) feet respectively.

A 13-foot controlling depth as indicated on the charts is a significant restriction on the vessels. Generally, the minimum drafts of vessels involved with the Caribbean trade are fourteen to sixteen feet. For larger ships off-loading into smaller ships, a depth of 25 feet is required. This exceeds the earlier depth of 21 feet.

The Main Ship Channel, entrance channel to Safe Harbor, and Boca Chica Channel are delineated with lighted and unlighted markers. However, the course from the main ship channel to the Safe Harbor entrance channel is not as well marked and patch reefs are not far from the direct course. This could result in damage to vessels and the natural environment due to physical damage and spills.

Consequently, the course from the main ship channel to the entrance channel will need additional lighted markers. In addition, the channels themselves will need to be dredged periodically to maintain operating depths.

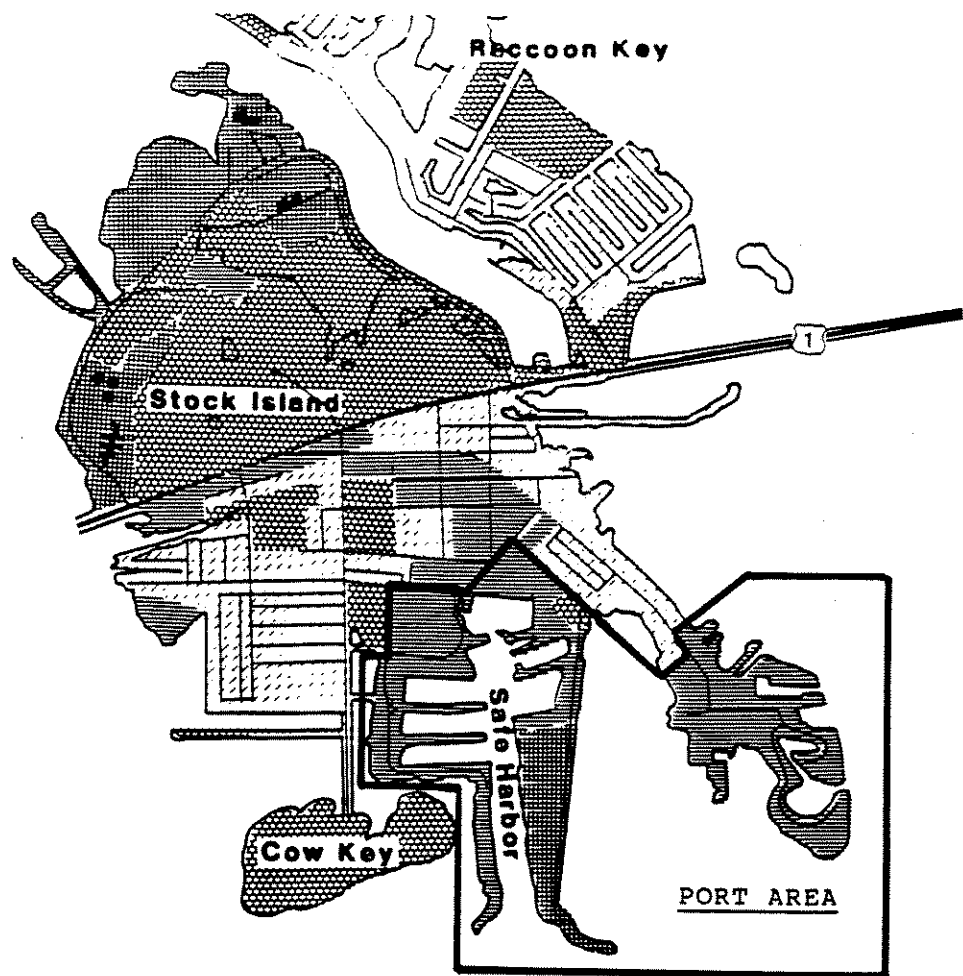
6.2.2 The Other Keys and Future Port Demand

Only Boot Key Harbor at Marathon has a water area and depth sufficient for a port. However, this currently is not truly a port facility because it is not predominantly for commercial purposes as F.A.C. 9J-5 requires. However, there are approximately 75 liveaboard vessels (the exact number varying seasonally) (Antonini, 1988). In addition, there are marinas and commercial fishing operations in the area around the ends of Eleventh and Fifteenth Streets and Fishermans Point just west of the Boot Key Bridge right-of-way. In addition, there are several recreational marinas and tour and charter vessels at the east end of the harbor.

Two vacant, large upland tracts of land remain on the harbor. These are the former Col Pac seafood house and adjacent land at MM 49.4 and the approximate ten (10) acre tract just west of 48th the street at MM 49.6. However, development orders have been issued for these properties. It is not expected that a demand will exist to develop Boot Key Harbor as a port.

The rest of the Keys contain marinas and commercial fishing areas. None of these are ports and the demand is not projected to grow such that a port will be developed. However, there could be instances when a port-like operation is needed on each key. In 1935, a hurricane destroyed the railroad. It is very possible and in fact probable that anyone of the existing bridges could be damaged or closed for a brief period of time. Under that scenario, a port-like facility could be needed on each island. However, like the weather, it is impossible to predict which island could become isolated.

Additional boat charters and maritime retail space is proposed on the former Col Pac property. A shopping center and recreational marina are proposed for the area west of 48th Street.



LAND USE LEGEND

	Residential
	Commercial
	Manufacturing
	Institutional/Community Facility/Government
	Historical Area
	Undeveloped/Park Area

1000 0 1000 2000 FEET



Figure 6.3

Existing Land Uses on Stock Island, Monroe County, Florida

Source: BR & R Associates, 1991. Part 150 Study, Key West International Airport

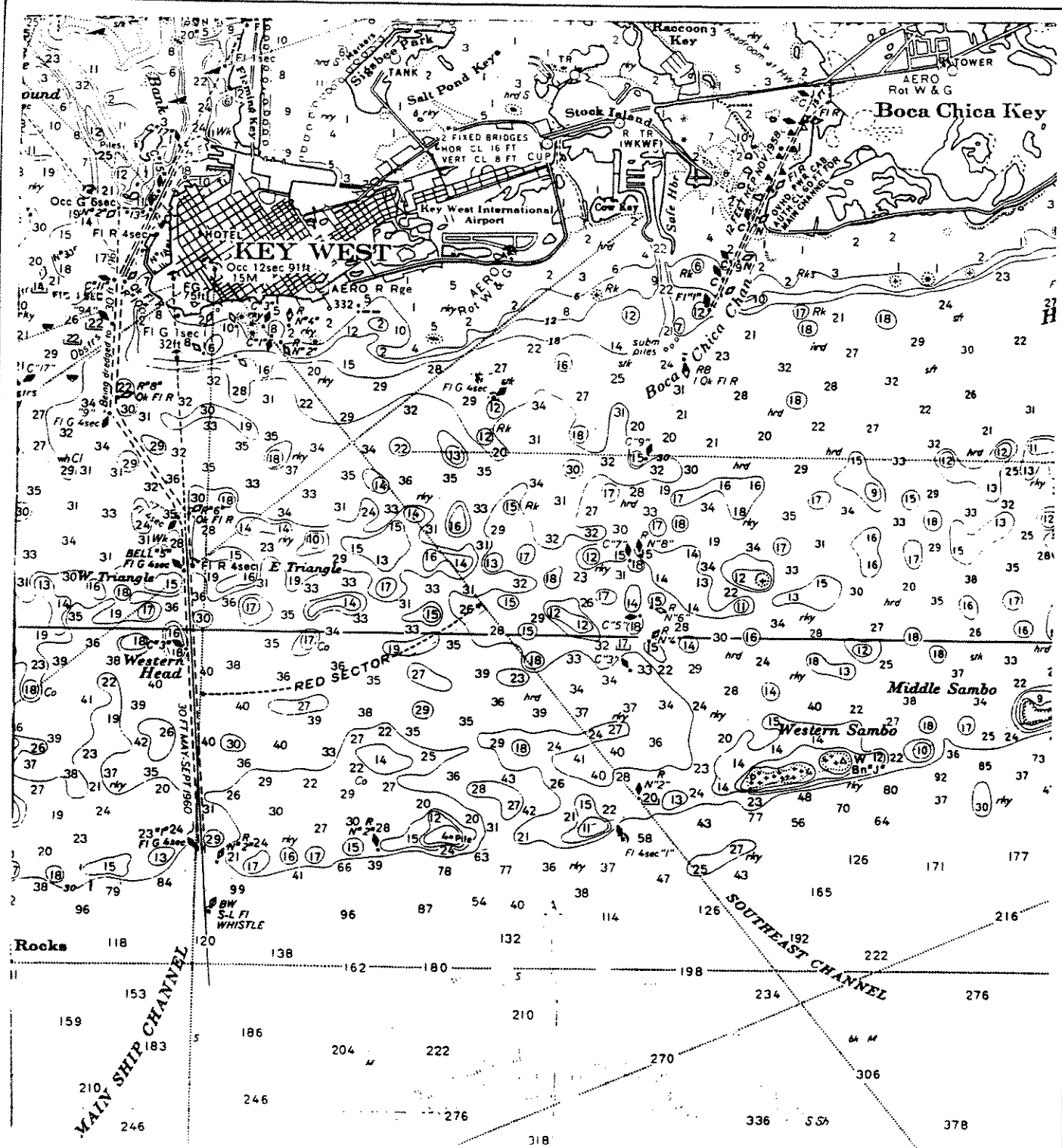


Figure 6.4

1961 Water Depths to the Safe Harbor/
Peninsula Area of Stock Island, Monroe
County, Florida

N

Source:

U.S. Coast and Geodetic Survey
Chart 1251, 5th Edition, rev. 12/18/61

Soundings in feet
Scale: 1:80,000

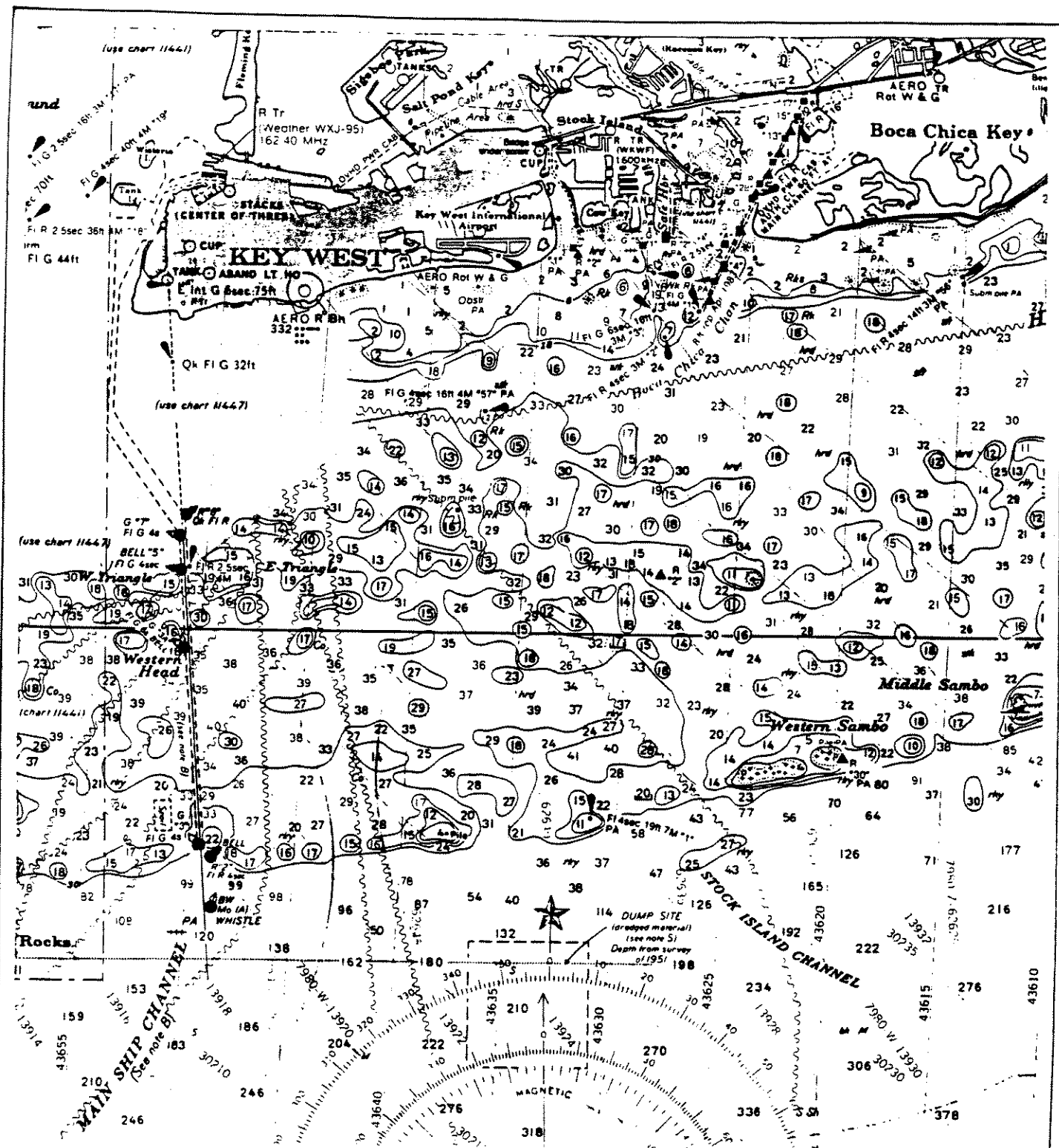


Figure 6.5 1985 Water Depths to the Safe Harbor/
Peninsula Area of Stock Island, Monroe
County, Florida

Source: NOAA Chart 11442, 24th Edition, 7/20/85

Soundings in feet
Scale: 1:80,000

Table 6.5
Airport Capital Improvements

Key West International Airport			
Project	Cost	Year	Need
New terminal building	2,000,000	94 & 95	A
Paving and drainage of parking lot	150,000	93	A
Runway extension or safety over run with crash, fire and rescue road	315,000	93	A
Ten T-hangers	45,000	93	A
Second fixed base operator	100,000	97	B
Upgrade navigation aids	40,000	96	B
Renovate and expand cargo facility	50,000	95	B
Airport drainage improvements	200,000	93	A
Environmental mitigation of airside improvements	N/A	93	A
Helipad and apron	100,000	95	A
Mangrove maintenance to port 77 standards	10,000	each year	A
Environmental assessment study	100,000	92	A
Environmental impact assessment study for airside improvements	100,000	92	A
Update master plan and airport layout plan	100,000	97	A
Key West International Airport replacement site selection study	20,000	92	B
Economic Impact Study	50,000	92	A
Standard rates and charges study	30,000	94	A
Pavement strength analysis	50,000	92	A
PFC study and application process	50,000	97	B

Table 6.5 (cont.)
Airport Capital Improvements

Marathon Airport			
Project	Cost	Year	Need
Marathon pass, terminal construction, A&E, utilities, landscaping and irrigation, electrical, miscellaneous and sewage treatment plant, construction and electrical	4,470,000	93 & 94	A
Access roadway	380,000	94	A
East parking lot	290,000	94	A
West parking lot	90,000	94	A
Commercial aviation apron	680,000	93 & 94	A
Replace fencing	30,000	94	A
Landscape and irrigation, buffer other than that immediately with the terminal	60,000	93	A associated
Taxiway guidance signs	30,000	94	A
Obstruction lights and trim north buffer	50,000	93	A
Develop 5 T-hangers	30,000	93	A
Helipad and apron	100,000	96	B
General aviation ramp and fuel farm	400,000	97	B
Land acquisition on east boundary	N/A	97	A
Improve navigation aids	40,000	96	B
Drainage improvement	180,000	94	A

- A) Necessary to satisfy existing deficiencies.
 B) Necessary to provide for future growth.

Table 6.6
Port Capital Improvements

Stock Island Port Area			
Project	Cost	Year	Need
Repair flooding on Fourth and Fifth Streets, Stock Island	15,000	94 (1)	A
Repair flooding on Peninsular Avenue, Stock Island	15,000	94 (2)	A

- A) Necessary to satisfy existing deficiencies.
- B) Necessary to provide for future growth.

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Appendix

APPENDIX
SURROUNDING PROPERTIES, OWNERS, WATERFRONT,
NEAREST STREET AND USE,
SAFE HARBOR / PENINSULA AREA, STOCK ISLAND

RE # 123540 Owner: c/o Daryl W. Singleton

Waterfront: No ☐ Yes ☒

Nearest Street: Front Street

Use: Packing Plant, Shrimp boat dock, Fish house, Boat building,
Ice plant

RE # 123550 Owner: City of Key West

Waterfront: No ☐ Yes ☒

Nearest Street: Front Street

Use: Electric Plant

RE # 123570 Owner: c/o Daryl W. Singleton

Waterfront: No ☐ Yes ☒

Nearest Street: Front Street

Use: Submerged lands

RE # 123590 Owner: Joseph J. O'Connell & Walter S.
Crumbley

Waterfront: No ☐ Yes ☒

Nearest Street: Front Street

Use: Marina
bay bottom

RE # 123600-0001 Owner: Joseph R. Rackman & Jeffery W. Bolotin

Waterfront: No ☒ Yes ☐

Nearest Street: Front Street

Use: Solid waste transfer station, Commercial fishing

RE # 123600-000101 Owner: K.W. Resort Utilities Corp.

Waterfront: No x Yes

Nearest Street: Front Street

Use: Sewage treatment plant

RE # 123610 Owner: Fla. Key Aqueduct Comm.

Waterfront: No Yes x

Nearest Street: Front Street

Use: Water treatment (testing)

RE # 123620 Owner City of Key West

Waterfront: No Yes x

Nearest Street: Front Street

Use: Electric plant

RE # 123630 Owner State of Florida Board of Trustees

Waterfront: No Yes x

Nearest Street: Front Street

Use: bay bottom

RE # 123650 Owner Florida Keys Aqueduct

Waterfront: No Yes x

Nearest Street: Front Street

Use: Water treatment
bay bottom

RE # 123660 Owner Robbie's Safe Harbor Marine Enterprises Inc.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Marine service, Boat storage, Fuel tanks, Fish processing, Boat repair, Ship dockage

RE # 123680 Owner Richard Eugene Perez

Waterfront: No ☐ Yes ☒

Nearest Street: Peninsular Ave.

Use: Packing plant, Commercial fishing

RE # 123720 Owner Safe Harbor Enterprises, Inc.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Junk yard

RE # 123730 Owner Safe Harbor Marine Railway Corp.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Storage of boats, cars, trucks, ect.

RE # 123740 Owner T & R Seafood, Inc.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Storage of boats (dry dock), Commercial fishing

RE # 123750 Owner Chevron USA Inc.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Service Station (not in use), parcel basically vacant

RE # 123760 Owner Key-Tex Shrimp Co., Inc

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Packing Plant, Shrimp boat dockage

RE # 123760-0001 Owner Treasure Island Food Prod. Inc.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Packing Plant, Shrimp boat dockage

RE # 123760-0002 Owner King Shrimp Co of Fla. Inc.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Packing Plant, Shrimp boat dockage

RE # 123760-0003 Owner Beverly J. Foltz

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Packing Plant, Shrimp boat dockage

RE # 123770 Owner Benjamin Bernstein Estate

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Commercial fishing

RE # 123800 Owner Pari-Mutuel Berenson, Inc.

Waterfront: No ☐ Yes ☒

Nearest Street: Shrimp Road

Use: Dog Race Track

RE # 123850 Owner Rivera Drive-In Theatre

Waterfront: No ☒ Yes ☐

Nearest Street: Shrimp Road & 5 th Street

Use: Vacant

RE # 125820 Owner Henry & Rose Marie Munro

Waterfront: No ☐ Yes ☒

Nearest Street: Maloney Ave.

Use: Marina

RE # 125850 Owner Peter C. Bacle, et ux

Waterfront: No ☐ Yes ☒

Nearest Street: Maloney Ave.

Use: Commercial fishing

RE # 125860 Owner Peter C. Bacle, et ux

Waterfront: No ☐ Yes ☒

Nearest Street: Maloney Ave.

Use: Commercial fishing

RE # 125870 Owner Peter C. Bacle, et ux

Waterfront: No ☐ Yes ☒

Nearest Street: Maloney Ave.

Use: Packing plant

RE # 125880 Owner Peter C. Bacle, et ux

Waterfront: No ☒ Yes ☐

Nearest Street: Maloney Ave.

Use: Packing plant

RE # 125890 Owner Richard & Rosemary Perez

Waterfront: No ☒ Yes ☐

Nearest Street: Peninsular Ave.

Use: Commercial Fishing

RE # 125900 Owner Richard Perez

Waterfront: No ☒ Yes ☐

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 125910 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 125920 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 125930 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 125940 Owner Richard Perez

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 125950 Owner Helio & Carleen Orpeza & Alfred & Joy Bowen

Waterfront: No x Yes

Nearest Street: Peninsular Ave. & Maloney Ave.

Use: Warehouse, Boat building

RE # 125960 Owner Helio & Carleen Orpeza & Alfred & Joy Bowen

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Boat building

RE # 125970 Owner Helio & Carleen Orpeza & Alfred & Joy Bowen

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Boat building

RE # 125980 Owner Helio & Carleen Orpeza & Alfred & Joy Bowen

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Boat building

RE # 125990 Owner Richard & Rosemary Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 126000 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 126010 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 126020 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 126030 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 126040 Owner Richard Perez

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 126050 Owner Richard Perez

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: Commercial fishing

RE # 126200 Owner Florence & James Yaccarino

Waterfront: No x Yes

Nearest Street: Maloney Ave.

Use: Commercial fishing

RE # 126210 Owner Florence & James Yaccarino

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: Restaurant (not in use)

RE # 126220 Owner Florence & James Yaccarino

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing (restaurant parking lot not in use)

RE # 126230 Owner Florence & James Yaccarino

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing (restaurant parking lot not in use)

RE # 126240 Owner Florence & James Yaccarino

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing (restaurant parking lot not in use)

RE # 126250 Owner Florence & James Yaccarino

Waterfront: No x Yes

Nearest Street: Peninsular Ave.

Use: Commercial fishing (restaurant parking lot not in use)

RE # 126260 Owner Florence & James Yaccarino

Waterfront: No x Yes

Nearest Street: Maloney Ave.

Use: Commercial fishing (restaurant parking lot not in use)

RE # 127250 Owner Benjamin Bernstein Estate

Waterfront: No Yes x

Nearest Street: 4 th Ave.

Use: Commercial fishing, Industrial

RE # 127260 Owner Pedro & Mirta Liz

Waterfront: No x Yes

Nearest Street: 4 th Ave. & Front Street

Use: Multi-family, Trailers

RE # 127270 Owner Pedro & Mirta Liz

Waterfront: No x Yes

Nearest Street: 4 th Ave.

Use: Multi-family, Trailers

RE # 127280 Owner Benjamin Bernstein Estate

Waterfront: No x Yes

Nearest Street: Front Street

Use: Commercial fishing

RE # 127280-0001 Owner Robert & Jerry Spencer

Waterfront: No x Yes

Nearest Street: Front Street

Use: Warehouses

RE # 127280-0002 Owner Alexander Rodriguez

Waterfront: No x Yes

Nearest Street: Front Street

Use: TCI

RE # 127290 Owner Miriam Bernstien

Waterfront: No Yes x

Nearest Street: 5 th St. & 4 th St.

Use: Packing plant

RE # 127300 Owner Riviera Drive In Theatre Inc.

Waterfront: No x Yes

Nearest Street: 5 th St. & 5 th Ave.

Use: Vacant

RE # 127320 Owner Riviera Drive In Theatre Inc.

Waterfront: No x Yes ____

Nearest Street: 5 th Ave.

Use: Vacant

RE # 127330 Owner Riviera Drive In Theatre Inc.

Waterfront: No x Yes ____

Nearest Street: 5 th Ave.

Use: Vacant

RE # 127340 Owner Riviera Drive In Theatre Inc.

Waterfront: No x Yes ____

Nearest Street: 5 th Ave.

Use: Vacant

RE # 127350 Owner Riviera Drive In Theatre Inc.

Waterfront: No x Yes ____

Nearest Street: 5 th Ave.

Use: Vacant

RE # 127360 Owner Safe Harbor Enterprises Inc.

Waterfront: No x Yes ____

Nearest Street: 5 th Ave.

Use: Parking lot for dog track

RE # 127370 Owner Berenson Pari-Mutuel, Inc.

Waterfront: No x Yes

Nearest Street: 5 th Ave.

Use: Parking lot for dog track

RE # 127420 Owner K.W. Resort Marina Corp

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: Marina

RE # 127460 Owner United States of America

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: FAA (air traffic facility)

RE # 127470 Owner Robert & E.J. Ming

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: Boat yard, Marina

RE # 127480 Owner Robert & E.J. Ming

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: Boat yard, Marina

RE # 127480-0001 Owner Robert & E.J. Ming

Waterfront: No Yes x

Nearest Street: Peninsular Ave.

Use: Single family
